TV COLOR TELEVISION

ST 70-550 text

GRUNDIG

Informationen für den technisch interessierten Benutzer

Das Grundig-Fernsehgerät bietet Ihnen den Luxus alle Einstellungen ausschließlich mit der Fernbedienung vornehmen zu können.

Die angewählten Funktionen werden im Bildschirm angezeigt (**OSD** = **O**n **S**creen **D**isplay).

Weitere vorteilhafte Besonderheiten:

- Benutzerführung in 9 Sprachen
- Sleeptimer, von 1 bis 99 Minuten einstellbar.
- 49 Programmplätze
- individuelle Lautstärke für jeden Programmplatz speicherbar
- individuelle Tonkanalwahl für Kopfhörer bei 2-Ton-Empfang
- automatischer Sendersuchlauf ATS (Auto-Tuning-System)
- Kindersicherung (frei wählbare 4 stellige Geheimzahl)
- keine Nahbedienung am Gerät mehr nötig.

Hinweise zum Aufstellen

Gerät vor Feuchtigkeit schützen!
Beachten Sie, daß die **Lüftungsschlitze** der Rückwand **nicht abgedeckt** werden.

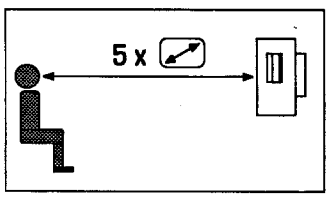
Stellen Sie Ihr Fernsehgerät nicht in die Nähe der Heizung.

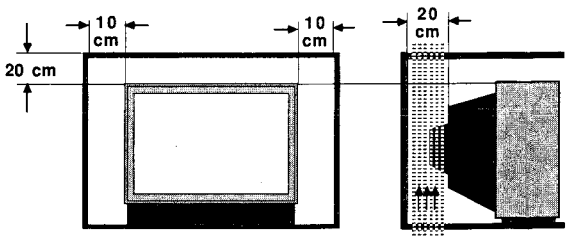
Wärmestau im Gerät ist eine **Gefahrenquelle** und beeinträchtigt die Lebensdauer Ihres Fernsehgerätes!

Bei Betrieb im Schrankfach müssen Mindestabstände eingehalten werden – siehe Skizze –.

Stellen Sie Ihr Fernsehgerät so auf, daß möglichst wenig Fremdlicht auf den Bildschirm fällt.

Der ideale Betrachtungsabstand ist das Fünffache der Bildschirmdiagonale – siehe Skizze.





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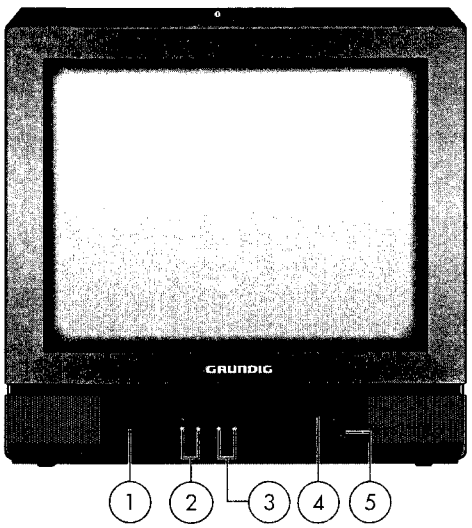
GRUNDIG
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STOP
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AV
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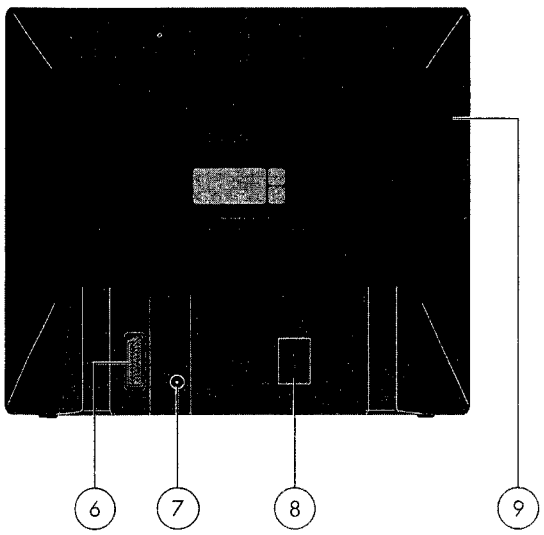
GRUNDIG
telepilot® 663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Technische Daten

Netzspannung:

220–240 V~ 50/60 Hz
(Regelbereich des Netzteiles 190...264 V)

Aufnahme:

ca. 85 Wh
In Bereitschaft (stand by) ca. 15 Wh

Empfangsbereiche:

Kanäle 01 ... 99
Sonderkanäle S 01 ... S 99

Tonendstufe:

2 × 20 W Musikleistung

Service-Hinweise für den Fachhandel:

Das Netzkabel dieses Fernsehgerätes ist steckbar ausgeführt. Für Ersatzzwecke bestellen Sie bitte bei einer Kundendienststelle.

Netzkabel mit Rundstecker ⊡ auf der Geräteseite: Bestell-Nr. 8290-991-275.

Das Gerät entspricht den VDE-Sicherheitsbestimmungen und den Vorschriften der Deutschen Bundespost (Zulassungszeichen siehe Typenaufkleber auf der Geräterückseite), ferner der Verordnung über den Schutz vor Schäden durch Röntgenstrahlen. Die Röntgenstrahlung – verursacht durch die Bildröhre – ist ausreichend abgeschirmt und darum völlig ungefährlich. Beschleunigungsspannung max. 27 kV / 1,5 mA. Das Gerät ist mit einer eigensicheren Kathodenstrahlröhre nach Anlage III der Röntgenverordnung ausgestattet.

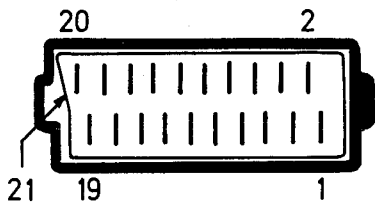
Unsachgemäße Eingriffe, insbesondere Verändern der Hochspannung oder Einbau eines anderen Bildröhrentyps, können dazu führen, daß Röntgenstrahlung in erheblicher Stärke auftritt. So veränderte Geräte entsprechen nicht mehr dieser Zulassung und dürfen nicht betrieben werden.

Änderungen und Irrtümer vorbehalten!

Kontaktbelegung EURO-AV-Buchse ⑥

Wenn Sie an den Fernsehempfänger Zusatzgeräte anschließen wollen (z.B. Computer, Verstärkeranlage), dann kann Ihr Fachhändler anhand der folgenden Anschlußtabelle eine normgerechte Verbindung herstellen:

Stift		Signal
1	=	Audio Ausgang rechts
2	=	Audio Eingang rechts
3	=	Audio Ausgang links
4	=	Audio Masse
5	=	Blau Masse
6	=	Audio Eingang links
7	=	RGB Blau Eingang
8	=	Schaltspannung
9	=	Grün Masse
10	=	–
11	=	RGB Grün Eingang
12	=	Masse
13	=	Rot Masse
14	=	Masse
15	=	RGB Rot Eingang
16	=	RGB Schaltspannung
17	=	Video Masse
18	=	RGB Schaltspannung Masse
19	=	Video Ausgang
20	=	Video Eingang
21	=	Abschirmung/Masse



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Information for the Technically Interested User

Your Grundig TV receiver offers the great advantage that all adjustments can be effected exclusively by means of the remote control handset.

The selected functions are displayed on the picture screen (**OSD** = **O**n **S**creen **D**isplay).

Further useful features:

- User's guide possible in 9 languages.
- Sleep Timer, adjustable from 1 to 99 minutes.
- 49 programme positions.
- The individual sound setting of each programme position can be stored in memory.
- Individual sound channel selection for the headphone on thwo-channel-sound reception.
- ATS (Auto Tuning System).
- Childproof lock (4-digit code number of your choice).
- Adjustments on the TV set itself are no longer required.

Notes on Installation

Protect the unit against humidity!
Do not **obstruct** the **ventilation slots** in the back panel.

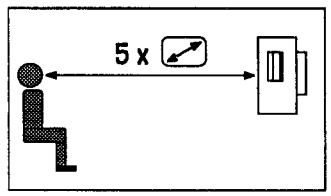
Do not place the set in the immediate vicinity of a heat source.

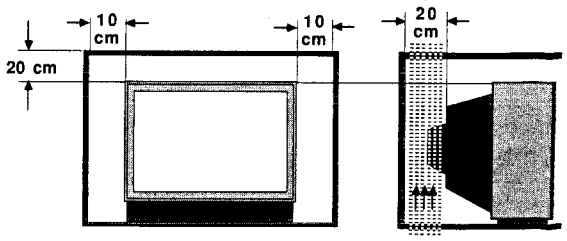
A **build-up of heat** represents a **source of danger** and reduces the life of the set.

When operating the receiver in a closed cabinet, certain minimum distances must always be maintained – see figure.

Position the receiver so that as little stray light as possible falls on the screen.

The ideal viewing distance from the set is five time the screen diagonal – see figure.





The Buttons and Connections on the TV Receiver

① Mains switch for switching on and off.

② **–** ◢ **+** volume setting buttons.

③ **– P +** buttons for selecting programme positions.

④ Receiver in standby mode – an illuminated dot is visible in the display.

⑤ Headphone socket, ø 3.5 mm.

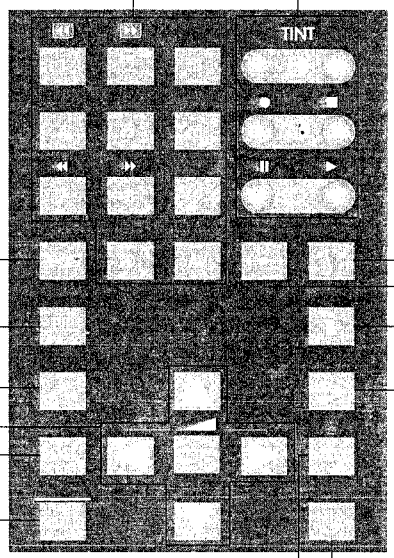
⑥ EURO-AV socket. Universal connection, DIN EN 50 049 eg : for video and RGB connection.

⑦ Aerial socket, 75 Ω, coaxial, DIN 45325 IEC 169-2

⑧ Mains connection

⑨ Recessed grips on both sides

The Buttons on the Remote Control Handset



1-0
AV For selecting programmes and switching on from standby.

-For directly selecting channels/special channels.

-For selecting the AV positions.

P/C For selecting programmes/channels special channels.

-For calling up the ATS function (keep pressed for about 3 sec).

PIP Not used

Not used

For stepping through the programme positions (1,2,3...).

For stepping through the programme positions (...3,2,1).

- For moving up and down in the displayed menu to make a choice.

Volume up/down

-For moving left and right in the displayed menu to make a choice.

OK For confirming an entered value (storing in memory)

- For calling up the basic settings of the TV set (picture and sound).

+1 For letting appear/disapper the clock time indication.

Black/white contrast

Colour contrast

Brightness

The values are directly modified by means of the rocker button.

For changing the sound channel on two-channel-sound broadcasts. For switching over to mono reproduction to improve the sound quality in the case of poor stereo reception (noisy sound).

Stereo base expansion/spatial sound

For letting appear/disappear the MENU (keep pressed the button for approx. 3 sec.).

-For letting appear/disapper the indication of the programme position with station identification (press button briefly).

For switching on and off the TV sound (muting)

For switching to standby. An illuminated dash is visible in the display of the TV set.

AUX For preselecting the volume function on headphone operation. Then modify the volume with the setting buttons and .

VIDEO For remotely controlling a video recorder (keep pressed the VIDEO button).

SAT For remotely controlling a satellite receiver (keep pressed the SAT button).

Adjusting TV Programmes

The **remote control handset** represents the central control unit for your TV receiver.
It permits to perform all control functions and basic adjustments for the receiver.

- Insert the supplied battery observing the polarity indications on the bottom of the battery compartment. Close the compartment cover.

– Should your TV receiver no longer correctly respond to the remote control commands, the battery is probably exhausted.
Immediately remove an exhausted battery.
No responsibility will be taken for damage caused by a leaking battery.

Adjusting TV programmes

TV stations transmit television programmes on different channels, eg: the German TV station Dillberg the "First Programme" (ARD) on channel 6.

The TV programmes offered by the TV stations must be "placed" on the programme positions of the TV set.

The adjustments required for this must only be carried out for the initial setting up of the set or when the reception conditions have changed (eg: in the case of relocation or connection to a cable TV system).
There are four possible methods for allocating TV programmes to the programme positions of the TV receiver:

1. With **ATS**, the automatic channel search.
   – This method is recommended if you do not know the channel numbers of the received programmes.
2. By **directly entering the channel numbers**.
   – This is the fastet method, provided you know the channel numbers.
3. With the **manual channel search**.
4. By **entering the channel numbers in the menu**.
   – This is the most detailed of the four programming methods and offers in addition the possibility of entering a station abbreviation and fine tuning the picture sharpness.

If you have decided on **one** of the **four tuning possibilities** and have performed the required adjustments, you need not perform in addition the remaining possibilities.

Switching on

- Switch on the TV set with the mains switch IO ①.

– The programme position 1 is automatically selected and the indication P1 appears in the display of the receiver.
– On the picture screen the indication P1 and a station abbreviation (if programmed) are briefly visible.

Volume

- Adjust the desired volume with the buttons ◀ ▶ on the remote control handset (if you find the preset value too high or too low).

Adjusting TV Programmes

1. Adjusting TV programmes with the help of ATS

ATS – (Automatic Tuning System) is an automatic channel search system.

ATS – helps you in a quick and simple way to adjust all offered TV programmes even if you do not know the channel numbers.

ATS – the automatic channel search will automatically stop as soon as it has found a channel on which a programme is broadcasted.

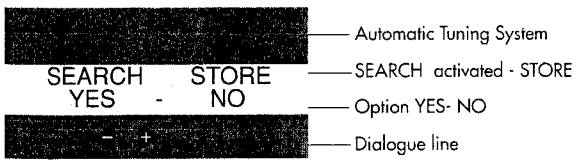
How to proceed:

Calling up ATS

- Press and keep button **P/C** pressed for approx. 3 sec.

– The Automatic Tuning System **ATS** and the programme position with the channel number appear on the picture screen.

– Indications in red letters are activated.



Starting ATS

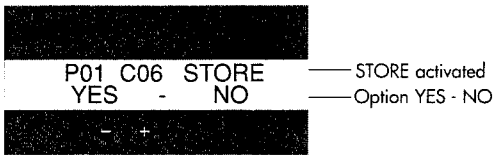
- Press button ◀: **YES** is activated.

– **ATS** is started with channel number **C00** and will stop as soon as it has found a channel on which a programme with sufficient signal strength is broadcasted.

– Programme position P1 is automatically selected.

Storing a channel number in memory

Using **ATS** you have found a programme on programme position P1 and wish to store this in the memory.



- Press button ◀. The channel number of the found programme is stored in memory (< YES).

– In addition to the channel number of the found programme, the programme position P; is also stored in memory.

– Programme position P2 is automatically called up and the ATS system is started again to search the next programme.
(Manual selection of programme positions is not possible. To return to programme position P1, you must exit ATS and start anew).

If you do not wish to store the channel number

because you intend to allocate the respective programme position to a different programme (channel)

- press button ▶. The channel will not be stored (> NO).

– The programme position P1 is not changed and the channel search system is started again.

The ATS channel search system scans the whole channel range from C00 to C99 and S01 to S99.
It is possible to exit the **ATS** function with button **i**.

Adjusting TV Programmes

2. Directly entering the channel number

Example:
The "Second Programme" (ZDF) is broadcasted on channel 34 and you wish to allocate it to programme position 2.

How to proceed:

Selecting a programme position

- Press the numbered button **2** or step to the programme position 2 with button **+** or **–**.

– The indication P2_ (for two-digit entries), appears in the display. If no two-digit entry is made, the indication will change for 1-digit entry after a short period of time.

Selecting the channel mode

- Press button **P/C**.

– The letter **C** (**C** stands for channel) and a number between 00 and 99 appear in the display and on the picture screen.

- If you can receive cable TV programmes on special channels and you wish to adjust such a programme, then press the button **P/C** once again.

– The letter **S** (**S** stands for special channel) appears in the display and on the picture screen.

Entering the channel number

- When the programme position and a channel number are visible, eg: $\frac{P2}{C34}$, press the numbered buttons **3** and **4**.

– In doing this, you have entered the channel number 34

Storing the channel number in memory

- During the indication of the programme position and the newly entered channel number, press button **OK**. The message **MEMO → OK** will appear.
- When this message is visible, press button **OK** once again.

– The channel number is stored in memory.

– If the message disappears before having pressed the button **OK**, you must enter the channel number anew.

3. Adjusting TV programmes with the help of the manual station search system

Example:
You are receiving the programme SAT1 on one of the special channels (S01-S99) and wish to allocate this programme to programme position P6 legen.

How to proceed:

Selecting the programme position

- Press the numbered button **6**.

– Programme position P6 is selected.

Selecting the channel mode

- Press button **P/C** twice.

– The letter **S** (**S** stands for special channel) appears in the display.

Starting the manual station search

- Press and keep pressed button ▲ (to search upwards) or button ▼ (to search downwards).

– The channel search stops at each channel on which a programme is received.

- If the found programme is not the desired one, start the channel search again (with button ▲ or ▼) until you get the desired programme (SAT1).

Storing the channel number in memory

- During the indication of the programme position and the found channel number, eg: $\frac{P6}{S40}$, press button **OK**. The message **MEMO → OK** will appear.
- When this message is visible, press button **OK** once again.

– The channel number is stored in memory.

The Menu

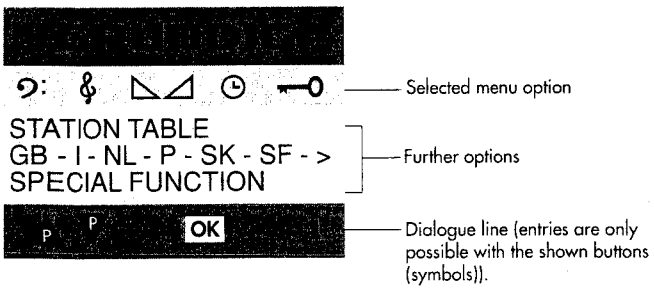
With the menu it is possible to select various functions and make adjustments with the help of dialogue lines. You have the choice between four menu options:
- Sound correction (bass, treble, stereo balance), Timer, childproof lock
- Programme adjustment (with station identification and fine tuning).
- Language selection.
- Special functions.

Calling up the menu

How to proceed:

- Press and keep button **i** until the message **OK → MENU** appears.
- Press **OK** button while **OK → MENU** appears on screen and the **MENU** will be displayed.

– You can exit the menu by pressing button **i** or button **TV**.
– During the display of the menu, the operating controls on the TV set are out of function.


Selected menu option
STATION TABLE
GB - I - NL - P - SK - SF - >
SPECIAL FUNCTION
Further options
OK
Dialogue line (entries are only possible with the shown buttons (symbols)).

Selecting a language

It is possible to select between several languages for the dialogue with your TV receiver. After having made a choice, the messages on the picture screen will appear in the respective language. It is therefore recommended to make this choice at first.

How to proceed:

- Select the third menu option (line) with button ▲ or ▼.

– The menu option for **selecting language** (with country code) is displayed against a light blue background.

- Press button **OK**.

– The select-language function is activated and the selected language (abbreviation) is highlighted in red.
– The indication **OK** in the dialogue line will also be in red.

- Select the desired language with button ◀ or ▶.

– From now on, all messages will be in the selected language.

- Press button **OK**.

– The selected language is stored in memory.

The Menu

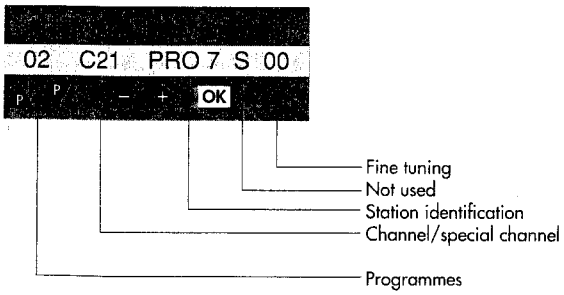
Adjusting TV programmes

Example:
The "Third Programme" is broadcasted on channel 59 and you wish to allocate it to programme position P3 and to enter the station abbreviation (identification) BR3. Please ask your specialized dealer on which channels further programmes can be received in your area.

How to proceed:

Selecting a programme position

- Use button ▲ or ▼ to select the second menu option.
- The menu option – **STATION TABLE** – is highlighted on blue background.
- Press button **OK**.
- The respective activated position is shown in red letters.
- The data of the current programme position appears on the TV screen.



- Use button ▲ or ▼ to select the desired programme position.

The picture/audio signal of a descrambler (decoder) is connected to the black EURO AV socket. It can be switched to any programme position.

- Press AV button.
- **P.R** appears on screen.

Entering the channel number and station identifaction

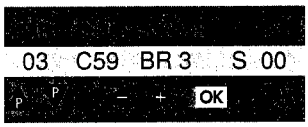
- Menu option – STATION TABLE – is already confirmed by **OK**, press button ▶.
- It is now possible to switch over between channel and special channel entry. For this
- press button ▲ or ▼.
- The letter **S** (= special channel) appears.
- Press button ▲ or ▼ again to switch back to the indication **C** (= channel).
- Press button ▶.
- Enter the desired channel number **as two figures** with the numbered buttons.
- If you do not wish to make further entries (station identification, fine tuning), then
- press button **OK**.
- The channel number is stored in memory.

It is also possible to select the desired channel number step by step with button ▲ or button ▼.
If channel **00** is entered and stored on a station preset, e.g. **P12**, it is only possible to select station presets **P01** to **P11** and **A1** to **A3** using buttons ▲ or ▼.
This adjustment has **no effect** on entries being made with the numbered buttons **0 . . . 9**.
If button ▲ or ▼ is pressed and kept down, the channel search system is started and stops at each channel on which a programme is received.
- You now have entered channel 59 on programme position 3.
- Now you can enter the station identification BR3.
- For entering station identifications, four positions are available for each programme position. These positions can be filled with letters, figures or special characters (eg: a blank "■" for spaces) of your choice.

The Menu

How to proceed:

- Press button ▶.
- The first position of the station identification is activated.
- Press button ▲ or ▼ (▲ to move up: ABC..., ▼ to move down: ...CBA) until the letter B appears.
- Press button ▶.
- The next position for entering the letter R is activated.
- Press button ▲ or until the letter R appears.
- Repeat the above steps until the full station abbreviation BR3 is entered.
- Following the above example, you have allocated the channel number C59 and the station abbreviation BR3 to the programme position P3.
- If you wish to make no further entries, then
- press button **OK**.
- The channel number and the station identification are stored in memory.



Finetuning – Picture Sharpness

The TV set will automatically tune to best picture sharpness. However, on difficult reception conditions, it may occasionally be necessary to alter the setting of the picture sharpness, i.e. to adapt the tuning point to the reception or signal conditions, with the help of the **finetuning** menu option.

How to proceed:

- Repeatedly press button ▶ until the figures below the letters **FT** become red.
- Press button ▲ or ▼.
- This permits to alter the medium fine tuning value to + or – until the best picture impression is obtained (from 64– to 63).
- Press button **OK** to store the modified value in memory.
- When storing is completed, the programme data of the next programme position appears on the picture screen.
- Briefly press button **i** to return to the **main menu.**

Sound corrections

You can correct all sound settings according to your personal taste.

How to proceed:

- Select the first menu option (line) with button ▲ or ▼.
- Press button **OK**.
- Use button ▶ or ◀ to select the desired symbol.
- 𝄢 Bass
- 𝄞 Treble
- ◣◢ Stereo balance
- Press button **OK**.
- A scale for the selected symbol appears on the picture screen.

- Adjust the desired value with button ◀ or ▶.
- By briefly pressing button **i**, you will return to the **main menu**.

– The changed value is not stored in memory.

Storing the changed value in memory

If you wish that the value be permanently changed, then

- Press button **OK**.

– Screen will display **MEMO → OK**.

- Press button **OK** while the message **MEMO → OK** is visible.

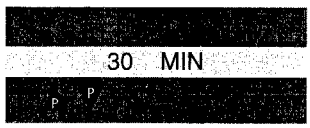
– The newly adjusted value is stored in memory.

SLEEP-TIMER

It is possible to activate the Sleep Timer of your TV set for a duration of 01 to 99 minutes, after which the set will automatically be switched to standby.

How to proceed:

- Select the symbol ⏲ in the first option line of the main menu with button ▶ or ◀
- Press button **OK**. The **SLEEP-TIMER** menu appears on the picture screen.



- Adjust the desired time period with the numbered button **0...9** or with button ▲ or ▼ (15 minutes steps).
- Press button **i**.

– You are in the **main menu** again.

– When the adjusted time period has elapsed, the TV receiver is switched to standby.

– Entering »**00 MIN.**« will deactivate the sleep timer.

Activating the childproof lock

The childproof lock permits to protect your TV receiver against use by unauthorized persons.

How to proceed:

- Select the symbol ⊸ in the first line of the main menu with button ▶ or ◀
- Press the button **OK**. The childproof lock menu appears on the picture screen.
- Enter a **four digit** code number (eg: 1111) with the numbered buttons **0...9**.
- Press button **OK**.

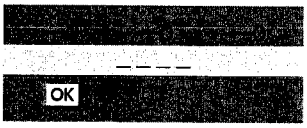
– The code number is stored in memory.

Please note down your personal code number!

If you should forget or mislay your code number, the ⏏ on the last page will help you. Pressing this combination of buttons will cancel the code number.

Deactivating the childproof lock

If you switch on the locked TV receiver, a message inviting you to enter the code number will appear.



How to proceed:

- Enter your code number with the numbered buttons **0...9**.

– The unit is automatically switched to TV operation.

The Menu

Erasing the code number

- Select the symbol ⊸ in the first line of the main menu with button ▶ or ◀
- Press button **OK**: The childproof lock menu appears.
- Enter your stored code number as **4 figures** with the numbered buttons **0...9** (eg: 1111).

– The code number is erased.

Special Functions

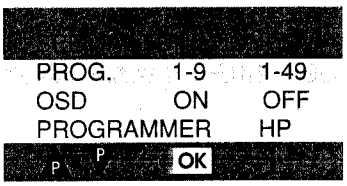
Restricting programme selection

If you need only the programme positions 1 to 9 out of the 49 programme positions, you can restrict programme selection correspondingly.

How to proceed:

- Select the menu option – **SPECIAL FUNCTIONS** – with button ▲ or ▼.
- Press button **OK**.

– The menu – **SPECIAL FUNCTIONS** – appears on the picture screen.



– The first menu option – **PROG.** – is activated.

- Press button **OK**.
- Press button ◀ or ▶.

– This switches the receiver to **one digit** programme selection mode (programme position 1 to 9).

- Pressing button ◀ or ▶ again switches back to **two digit** programme selection mode (eg: P10).
- Press button **OK**.

– Your choice is stored in memory.

– Restricting programme selection has no effect if you select the programme positions with button ▲ or ▼.

Switching on and off the bar indications

In the menu option – **OSD ON OFF** – you have the choice between

OSD ON: The bar indications for volume, black/white contrast, colour contrast, and brightness, as well as the station identification are switched on.

OSD OFF: The bar indications for volume, black/white contrast, colour contrast, and brightness, as well as the station identification are switched off.

How to proceed:

- Select the menu option – **OSD ON OFF** – with button ▲ or ▼.
- Press button **OK**.
- Press button ◀ or ▶.

– This switches to **OSD OFF**.

- Pressing button ◀ or ▶ once again switches back to **OSD ON**.
- Press button **OK**.

– The choice you made is stored in memory.

The menu option – **PROGRAMMER HP** – is provided for the automatic programming of your TV receiver.
This programming can only be performed by your specialized dealer, provided he is in the possession of an **IR DATA-PROGRAMMERS** unit.

Calling Up the Programme Indication Mode

- It is possible to let appear and disappear the programme position, the programme identification, and the sound information on the picture screen by briefly pressing the button **i** (OSD ON).

Switching the TV Receiver to Standby

It is possible to switch the TV receiver during television pauses to standby.

How to proceed:

- Press button ⏻.
- The TV receiver is switched to standby.
- A dot will light up in the display ④ of the receiver.
- Approx. 10 minutes after the end of transmission or if transmission fails, the TV set automatically switches to standby.
- Press one of the numbered buttons 1...9 or the button ▲ to switch the receiver on again.

Switching Off the TV Receiver

- If you do not use the TV receiver for a longer time (eg: during the night), switch it off with the mains switch ① on the set.

Remote Control of a Video Recorder

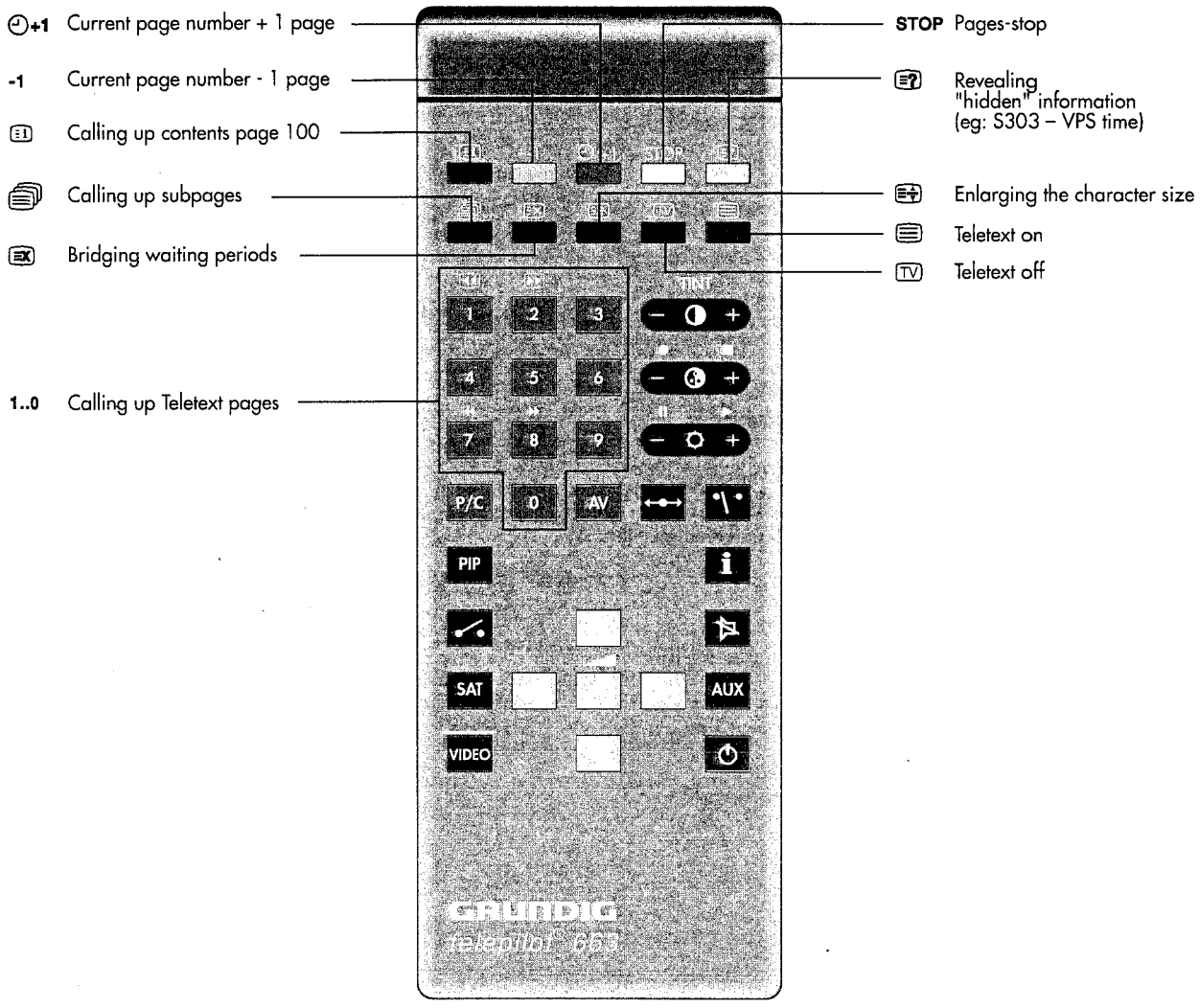
You can also use the remote control handset of this TV receiver for remotely controlling a **video recorder**. To find out which video recorders are suitable for this purpose, please ask your dealer.

- Press and keep pressed button **VIDEO**.
  In doing this, the remote control is switched to video recorder operation.
  Now press the desired function button.

The following listing shows you the functions that can be remotely controlled.

- ◀◀ (numbered button 1) = Picture search, reverse
- ▶▶ (numbered button 2) = Picture search, forward
- ● (button −⊙) = Recording start
- ■ (button +⊙) = Stop
- ◀◀ (numbered button 7) = Fast rewind
- ▶▶ (numbered button 8) = Fast forward wind
- ❚❚ (button −☼) = Pause
- ▶ (button +☼) = Playback start

Teletext Operation



Teletext Operation

This TV set is already equipped with a Teletext decoder.

General

Teletext is an additional information that is broadcast by the TV station along with the TV programme.

The built-in Teletext decoder of your set enables you to display this additional information on the screen.

Teletext is transmitted in the form of texts or graphic representations, or as subtitles to the TV programme. The latter is intended to help the hard of hearing.

Teletext is transmitted page by page. The pages are numbered and may be selected by remote control.

Operating

Use the numbered buttons **1...0** to select the station position from which you wish to call up the Teletext pages.

Switching on Teletext

- Press button ▤ on the remote control handset.

– The contents page 100 or the Teletext page viewed last will appear.

Calling up Teletext pages

- Select the number of the desired page as **three figures** with the numbered buttons **1...0**.

– The number of the selected page appears at the top of the TV screen and the page appears after a short time.

- The next page can be selected with button ⏲ **+ 1** or **– 1** **(current page number + 1 page, current page number – 1 page).**

Subpages

Some page numbers may contain several subpages which are changed automatically by the broadcasting stations. Subpages are marked by an insert below the clock time indication, eg: 3/6 means that the third of 6 subpages is shown.

If you wish to hold a subpage for a longer period

- press button **STOP**.

– Above the clock time **STOP** appears.

- To return to the changing cycle of the subpages, press button **STOP** again.

Calling up subpages directly

- Press button ▤.

– **– 0000** appears in the information line.

- Enter the desired number of the subpage as four figures (eg: 3) with the numbered buttons **1...0**.

– The selected subpage appears after a short period of time.

- To delete this function, press button ▤ again.

Calling up contents page

This function selects the contents page of the respective TV station.

- Press button ▤

– Page 100 appears.

Teletext Operation

Enlarging the character size

- Pressing button repeatedly:

– doubles the size of the top half of the page;
– doubles the size of the bottom half of the page;
– returns the complete page to normal size.

Displaying concealed text

The Videotext (Teletext) pages may contain "hidden" information, eg: quiz answers or the VPS times for programming a video recorder.

- Press button to make "hidden" information visible (eg: S 303 – VPS times).
- Press button once more and the information is hidden again.

Updating of information

1. Updating a page

The Teletext service updates certain pages, eg:
– pages containing exchange rates,
– pages containing sport reports,
– pages containing the latest news.

If you wish to watch the TV but to be nevertheless informed about the latest news, then

- first select the respective page.
- Press button .

– You will see the TV picture and Teletext information at the upper edge of the screen.
– As soon as the word **"UPDATE"** appears in the information line,

- press button .

– The updated Teletext page appears.

2. Bridging waiting periods

Whilst the TV set is searching for a Teletext page, you may return to the TV mode. To do this

- press button .

– You will see the TV picture and Teletext information at the upper picture edge.
– When the desired page is found, the word **"READY"** will appear.

- Press button and the page will appear.

Terminating Teletext

- Press button .

Picture and Sound Corrections

You can modify all picture and sound settings to suit your personal taste.

How to proceed:

- If you wish to **alter the volume setting**, press button ◀ (down) or ▶ (up) as long as required.
- The modified value will be displayed in a scale on the TV screen.
- If you press the button **OK** after the scale has disappeared from the screen, the value which has been set before the modification will be retrieved.

Storing the modified value in the memory

- If you wish that the made modification be permanent, then press button **OK** while the volume scale is displayed on the screen.

MEMO → OK	will appear on the screen.

- While this message is visible, press button **OK** once again.
- The modified value will be stored in the memory.
- It is possible to store an individual volume value for each programme position.
- If you wish the correct the setting of picture values, then press on the – or + side of the respective rocker button as long as required.

Black/white contrast ◑
Colour contrast ◕
Brightness ☼

- The modified values will be displayed in a scale on the screen.
- **Store in memory** as decribed for the **volume**.

Note:
For checking the reliability of the modules in the receiver, this has been tested with maximum contrast in the factory. For your personal use it is recommendet that you **reduce** the contrast so that the best picture impression is obtained according to the place of operation of the receiver and the ambient brightness.

Stereo broadcasts

If the TV set receives a stereo broadcast, it automatically switches over to stereo sound reproduction.
- The message **STEREO** appears in the display and on the TV screen.
- If the stereo sound quality is poor (noisy sound), it is recommended to switch over to mono reproduction by pressing button "\".
- If you enter **MONO** as station identification on a programme position, all broadcasts received on this programme position will be reproduced in **mono**.

2-channel-sound broadcasts

If the TV set receives a 2-channel-sound broadcast, eg: a film with the original sound track on sound channel 2 and the local language dubbed on channel 1, you can select between the two channels.

- To do this, press button "\".

Sound channel selection is also possible when **listening with a headphone**.

- Press button **AUX** and select sound channel 1 or 2 with button "\".

Stereo base/spatial sound

This function expands the stereo base in the case of stereo broadcasts and improves the sound impression of mono broadcasts.

- Switch this function on and off with button ↔.
- A corresponding symbol appears on the TV screen.

Switching off the television sound

- Button 🔇 permits to switch on and off the televison sound.
- When the sound is switched off, the symbol 🔇 will be displayed.
- The television sound is also switched on again when pressing the volume button ▶ or when selecting another programme position.

Picture and sound corrections on video playback

If there should be discrepancies in picture and sound between the TV picture you are accustomed to and the video playback (eg: too loud sound or too much colour contrast), these values can be corrected and stored in memory with the help of the remote control handset.
(These corrections do not change the basic settings of the TV picture).

Connecting Possibilities and Operation ...

... with a headphone

How to proceed:

- Insert the headphone plug (3.5 mm ø jack plug) into socket ⑤.

Operation:

- Press button **AUX** and then adjust the desired volume with button ◀ or ▶.

– The volume setting is indicated in a scale on the TV screen.

... with a video recorder or camera recorder

How to proceed:

- Connect the video recorder, camera recorder or descrambler with an appropriate connecting lead to the **EURO-AV socket** ⑥ (at the back of the unit), or with an aerial lead (75 Ω) to the **aerial socket** ⑦ (at the back of the unit)

Example:

Video- or camera recorder connected to Euro-AV socket ⑥.

- **Press button AV** on the remote control handset.

– The programme position indication **A V** appears in the display.

- Start playback of the recorder. The playback is visible on the screen of the TV receiver.

Example:

Video- or camera recorder connected to the aerial socket ⑦.

Programme the playback channel specified for your video recorder (between 30 and 40) on any desired programme position (eg: P16). You should normally find the playback channel in the operating instructions of your recorder.
If you nevertheless do not know the playback channel, start playback of the recorder and search the channel with the automatic channel search system of the TV receiver.

Note down the selected programme position for later video playback.
It is possible to correct the sharpness of the video picture if this should be required (see chapter "Fine Tuning – Picture Sharpness" in the MENU).

- Select the **Programme** option in the MENU.
- Select the desired programme position, eg: P15
- Enter the VCR playback channel, eg: C38
- With **NAME** activated in the **MENU**, enter AV–– on the first two positions (time constant switch-over), eg: AV–– (blanks ––)
- Press button **OK** to store the setting.
- Press button **i** (2 ×) to return to the TV picture.

...for descrambler (decoder)

A number of stations broadcast programmes via cable in scrambled form. This makes picture and sound unintelligible. Programmes of this type can be unscrambled with a descrambler.

How to proceed:

- Connect the descrambler to the **EURO AV socket** ⑤.
- Select the station preset for the scrambled station.
- Select the second menu option – **STATION TABLE** – (see tuning stations in the menu), then
- Press **OK** button
- Press **AV** button

– P.R will be displayed on screen.

- Press **OK** button

– Setting is new memorised.

– Scrambled stations (signals) are fed from the television set to the descrambler, where they are unscrambled, and then returned to the television set for viewing in the normal way.

Specification

Mains voltage:

220–240V~ 50/60 Hz
(control range of the mains section 190...264V)

Power consumption:

approx. 85Wh
stand by approx. 15Wh

Channel coverage:

01 ... 99
and the special channels S 01 ... S 99

Sound output:

2 × 20W music power

Service Note for the Specialized Dealer:

The mains cable of this TV receiver is a plug-in cable. Order replacement cables at one of our after-sales service points.
Mains cable with round plug ⊡ at the side of the receiver: Order No 8290-991-275.

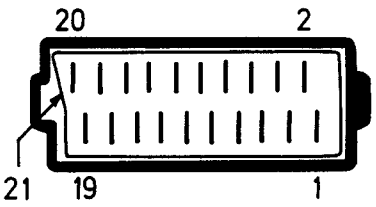
This equipment meets the international safety and interference regulations.
If your unit malfunctions, it is essential that you contact your dealer. Under no circumstances should you open the set yourself.
The manufacturer accepts no responsibility for damage which occurs under such circumstances.

Subject to alteration
E. and O.E.

Pin Connections of the EURO-AV Socket ⑥

If you wish to connect peripheral units (eg: computer, amplifier) to your TV receiver, the following table will enable your specialized dealer to make the correct standard connection.

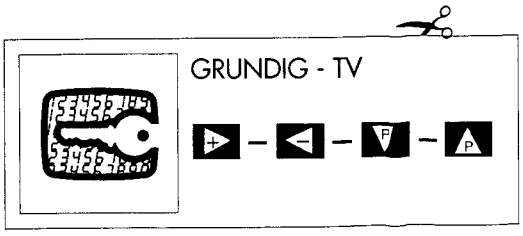
Pin		Signal
1	=	Audio output, RH
2	=	Audio input, RH
3	=	Audio output, LH
4	=	Audio, chassis return
5	=	Blue, chassis return
6	=	Audio input, LH
7	=	RGB, blue input
8	=	Switching voltage
9	=	Green, chassis return
10	=	–
11	=	RGB, green input
12	=	–
13	=	Red, chassis return
14	=	Chassis return
15	=	RGB, red input
16	=	RGB, switching voltage
17	=	Video, chassis return
18	=	RGB switching voltage, chassis return.
19	=	Video output
20	=	Video input
21	=	Screening/chassis return



Kanäle ohne Feinabstimmung einstellbar

Anzeige	Kanal	Standard
C01	E1	CCIR B : C
C02	E2	"
C03	E3	"
C04	E4	"
*	*	"
C10	E10	"
*	*	"
C12	E12	"
C13	A	B, Italien
*	*	"
C20	H	"
C21	21	CCIR G, H, I, K, L
*	*	"
C69	69	"
C70	70 ex	"
*	*	"
C73	73 ex	"
C74	X	CCIR Kabel
C75	Y	"
C76	Z	"
C77	Z+1	"
C78	Z+2	"
C79	2	OIR
C80	5	"
C81	E1	CCIR-Raster Norm 1...6
*	*	"
C90	E10	"
C91	E1	ZF-Lage gedreht
*	*	"
C94	E4	"
C95		frei
*		"
C99		"
S01	S1	CCIR Kabel 7 MHZ
*	*	"
S20	S20	"
S21	S21	CCIR Kabel Hyperb. 8 MHZ
*	*	"
S41	S41	"
S42		frei
*		"
S49		"

Hinweis für den Fachhändler
Information for the specialized dealer
Anvisningar för fackhandlare
Henvising til faghandleeren
Vihjeitä kauppiaalle.
Advertencia para distribuidores
Informatie voor de leverancier/speciaalzaak
Indication pour le revendeur spécialisé
Indicazione per il rivenditore
Indicação para àgentes da éspecialidade



GRUNDIG AG – D-8510 Fürth

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